PREVALENCE OF MASKED HYPERTENSION IN PATIENTS WITH METABOLIC SYNDROME

ABSTRACT

INTRODUCTION

In recent years, there are several divisions in the classification of Hypertension. Recently, a new entity has been described as normal blood pressure during consultation and elevated values outside of it. As such findings often escape the attention of the physician; it has been called Masked Hypertension. All evidence indicates that masked hypertension carries a heavy weight in long term prognosis. Metabolic syndrome is a cluster of metabolic disorders where in not just a single deranged parameter is taken into account. Patients with just hypertension are in increased risk with morbidity and mortality consequences. Masked Hypertension in metabolic syndrome can play an important role in prognosis. Hence in our study we rate the **prevalence of masked hypertension in metabolic syndrome patients.**

MATERIAL AND METHOD

Patients who satisfy at least 3 out of 5 criteria of NCEP ATP III criteria for metabolic syndrome are taken into the study. Patient's clinic BP, waist size, LDL, HDL and other relevant parameters are taken. Patient's 24 hour BP is measured by Ambulatory BP monitor (ABPM) machine. The parameters are correlated with metabolic syndrome and its significance is a measured.

RESULTS:

The results of the study conducted among 65 metabolic syndrome patients were presented here. The age of the study participants ranged from 34 to 59 years. Mean was 45 years with SD 5.6 years. Greater proportion was males 36 (55.4%). Greater proportions were non smokers 42(64.6%). Greater proportion of the patients 89.2% had Diabetes/impaired fasting blood sugars as co morbidity. The prevalence of masked hypertension among metabolic syndrome patients was 43(66.2%). Mean age of patients with masked hypertension is significantly higher (47 years) than patients who do not have masked hypertension (41.6 years). (p=0.000).

Mean weight of patients with masked hypertension is significantly higher (72 kgs) than patients who do not have masked hypertension (64.2 kgs). (p=0.000). No association was found between height and masked hypertension. Mean BMI is significantly higher among patients with masked hypertension (26.2) than among patients without masked hypertension (23). This difference was statistically significant (p=0.000). Mean systolic and diastolic BP are significantly higher among patients with masked hypertension than among patients who do not have masked hypertension. (p=0.000). Patients with masked hypertension have significantly higher waist circumference (99.8 cms) than patients who do not have masked hypertension (94.5 cms). (p=0.007). No significant difference in fasting blood sugar levels between the two groups. HDL is significantly lower and TGL is higher in patients with masked hypertension ($p<0.05$). Mean BMI is significantly higher among patients with masked hypertension (26.2) than among patients without masked hypertension (23). This difference was statistically significant (p=0.000).

CONCLUSION

Masked hypertension is present significant numbers in our population.

ABPM can bridge this diagnostic gap and help us in early intervention.

Traditional risk factors which may be modifiable or non modifiable still play a role in development of metabolic syndrome.

Impaired fasting glucose is a major component in the early interpretation of metabolic syndrome and it is an important component in the diagnostic criteria for metabolic syndrome.

Hence, in view of high prevalence ABPM measurement is warranted in high risk groups with normal Clinic blood pressure.

Keywords :

Masked Hypertension, Metabolic syndrome, ABPM, NCEP ATP III.